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Communications.

SURGICAL CASES.

By Louis Bauer, M. D., etc.,

Of Brooklyn.

Case of contraction of the right knee-joint. Unsuccessful attempt to relieve the same by gradual extension and brisement force, the latter being followed by extensive sloughing of the integuments, paralysis of the leg, hyperæsthesia and a squamous disease of the foot. Repeated brisement force after myotomy; failure of the same; subsequent amputation and recovery.

The case which I am about to place on record, bears in many respects a most interesting feature, both in a pathological and clinical point of view. The patient is an accomplished German lady, thirty-six years of age, and to all appearance, of unexceptional state of health and regularity. With the exception of light rheumatic attacks, she had been well up to the time when her last trouble began, being about three years ago. The affection of the knee-joint was not provoked by an external injury, and the attending symptoms render it plausible that it consisted in rheumatic synovitis. After some months duration, the disease terminated in imperfect fibrous anchylosis and angular contraction. An attempt by gradual extension was soon after made to reduce the limb to a useful position, but had to be abandoned on account of intense pain ensuing. At a later period, the extremity was, under the influence of chloroform, straightened by main force without previous division of the contracted hamstring muscles, and for a few days kept in splints. The consequences of this rather singular proceeding were very disastrous. The joint and its surrounding integuments became intensely inflamed and the latter in front and laterally dropped off sphacelated; the muscles of the leg lost their power; the skin, all sensation; the foot became and remained ever since œdematous; the epidermis was continuously thrown off in large scales as in ichthyosis, and so high a degree of hyperæsthesia of the foot ensued, that the gentlest touch would cause her the greatest agony; moreover, the constitution of the patient became so seriously invaded that the treatment had to be discontinued and the patient barely escaped with her life.

A year had intervened since that treatment, when the patient arrived from Louisville and placed herself under my charge. Her constitution had then recovered its former vigor, so that I could at once proceed with her case. On examination of the afflicted limb I noticed two deep seated and movable cicatrices in front of and laterally to the joint, about two inches in diameter. The mobility of the joint was very slight and unimpeded by the scars. The paralysis of the leg and the condition of the foot I have already mentioned. The knee was held in an angular position as it appeared by the contracted flexors, in which the gastrocnemius and soleus muscles seemed to participate. The entire extremity was cool, the leg slightly and the foot very œdematous, the natural contours lost and the muscles greatly attenuated. There was no discoloration noticeable. The joint was on pressure slightly tender and at times painful when roughly handled.

Presuming that the chief impediment rested with the muscular contractions which were apparent and that the elastic tissue of the above mentioned scars did not extend to the posterior wall of the capsule, I proposed dividing the muscles, breaking up the articular adhesions by forcibly flexing and extending the limb and accomplishing the rest by permanent and increasing extension. I was well aware that if this plan should succeed, that it could have hardly influenced the paralysis and the morbid sensitiveness of the foot, and that at best, the result would have been an infirm extremity. On the other hand, a straight position would have inevitably been followed by an improved circulation of the affected member from which some amendment might have been reasonably expected. At any

rate, the limb could not be rendered worse by that proceeding, if failure should attend it. Thus reasoning, I proceeded with the plan, ably assisted by Drs. Whaley, Willits, Barbour, Bennett, Sr. and Jr., and Cooper. After having divided the internal hamstrings, all muscular resistance seemed to have vanished, and the limb at once yielded to within an angle of thirty degrees from a straight position, whilst the fibrous adhesions within the joint yielded most readily. All efforts failing to render it straight, I suspended further operation and determined to rely on gentle pressure around the joint and extension by pulley and weight.

Already at this juncture, suspicion arose that the muscular contractions did not exclusively constitute the existing impediment, but that I had likewise to contend with proliferous elastic tissue at the posterior wall of the joint. Inasmuch as the operation was performed under perfect anesthesia, the patient suffered nothing, neither was it followed by any disagreeable results. With a view of rendering the elastic tissue atrophied, I continued for some length of time the circular pressure and the extension, but gaining nothing by them I determined on another trial. At this juncture, the divided internal hamstrings had firmly united and I had, therefore, to redivide them in order to bring the biceps in a state of tension. On this occasion I divided not only all the flexors, but detached subcutaneously also with the knife as far as practicable all the deeper strata of the scar tissue, yet with no better final result. The limb yielded a straighter position to powerful efforts, but resumed its former one as soon as the extension was relinquished. The muscular impediments being now entirely removed and the articular adhesion overcome, no other obstacles than elastic bands located posteriorly to the joint could be supposed. Inasmuch as they were inaccessible to the knife, the case had to be given up as hopelessly irremediable.

This unfortunate result did not come unexpectedly to the patient, although she was satisfied that nothing had been left untried to relieve her from her misery, yet her resolution was unbroken and she demanded the amputation of the affected extremity. Such determination was not surprising in a high-spirited woman, who had successively suffered for three years, been condemned to a sedentary mode of life, cut off from the enjoyment of her social relations and more or less disqualified for her duties as a wife and mother; yet the question with the surgeon to comply with such a demand was of a far different nature, involving grave responsibilities.

The patient had suffered but little, if any, by the treatment I had pursued. Her constitution was unbroken; her limb was almost painless and no danger was to be apprehended to health or life. On the other hand she was in a crippled condition without a shadow of hope of being relieved at any future period, and the swelling and tenderness of her foot were such as to remind her at all times of her misery. Moreover, the dangers of an amputation were diminished by the splendid constitution she enjoyed. In fine, the limb was worthless and at best a superfluous appendix to the body. An artificial leg would be a profitable substitute for a limb utterly worthless for locomotion. Considering all these points, I felt disposed to yield my consent, subject to the approval of the lady's husband, to whom I submitted my views and whom I desired to share the responsibilities of the proposed measure. That gentleman concurring no alternative remained but to proceed with the operation. I performed the same immediately above the knee-joint in order to obtain a long stump, more favorable to the use of an artificial leg. Prefer double flaps to the circular operation, a good deal of trimming with a strong pair of curved scissors became necessary in order to free the wound of all tendons and fascial appendices. The vascularity was quite considerable as in fact it usually is in the immediate neighborhood of long diseased structures. Numerous vessels had therefore to be tied. The wound was kept open almost an hour and not closed before the bleeding had entirely stopped. Notwithstanding this precaution, a parenchymatous bleeding ensued, which rendered the opening of the wound necessary. That no obstacle might be thrown in the way of first intention, I entirely dispensed with styptics and preferred fine ligatures which conjointly formed quite a bundle. The repeated administration of chloroform caused another impediment in creating painful emesis for about forty-eight hours. Notwithstanding these incidents, the wound healed kindly, in the most part by first intention, and recovery followed without further accident.

The examination of the limb disclosed very interesting facts:

1. The joint itself had undergone but moderate changes: the articular apophyses were indeed very hyperæmic and moderately infiltrated, but neither softened nor osteo-porotic, the articular cartilages partly scarified, leaving the bones bare on some prominent places;

the crucial ligaments were entirely intact; the synovial membrane very vascular but seemingly not otherwise structurally changed; there were some massive fibrous adhesions between the articular faces but so long as not to impede the mobility of the joint; there were, moreover, numerous fragments of other fibrous bands that had been torn off by the recent forcible flexion and extension. The patella seemed to have been strongly attached to the external condyle of the femur, but now was found moderately moveable. After having dissected off all adjacent parts from the capsular apparatus the same was found considerably thickened by evidently adventitious elastic tissue, and so firm was it, that alone it resisted the extension of the joint. In order to ascertain whether the lateral walls had anything to do with the resistance, they were completely divided, when it was found that the result was still unchanged thereby. My supposition, that the posterior wall of the capsule had offered the chief obstacle in the repeated brisement forcé and was the chief source of failure proved thus to be correct.

2. The muscles of the leg were greatly attenuated and had undergone partial fatty degeneration.

3. The divided Achillis tendon had reunited with an intermediate substance at least an inch long. Under the microscope the substance proved to consist of congestive tissue and fat.

4. Pieces of the popliteal and of the peroneus nerve subjected to microscopic examination gave unmistakable evidences of fatty disintegration.*

Concluding remarks. No practitioner at all conversant with the latest improvements in the treatment of joint diseases can fail to perceive that the orignal affection of the knee-joint was of a mild type and was untrammelled by a vitiated constitution. By proper management the knee-joint would have been prevented from anchylosing and angular contraction. If extension was inadequate, the division of the contracted muscles would have facilitated that result, and at the same time furnished the best of antiphlogistics in reducing the existing inflammation.

Unfortunately this was not done, hence the protracted course of the articular disease and the eventual permanent deformity.

No reasonable objection would be made against the latter attempt at straightening the extremity by gradually increased extension. But when this plan caused intolerable pain to the patient and threatened to light up new inflammation, it had to be abandoned. A close observer would have inferred that the muscular resistance could not be overcome in this manner.

Notwithstanding these clinical facts so conclusive in their meaning, another practitioner was ready to try brisement forcé *without previously removing* the muscular impediment. The consequences of this "singular proceeding" were very disastrous to the patient, but not more so than might have been foreseen. A new inflammation of the joint ensued, which would have made its progress to arthropyosis and caries, but for the timely suspension of the extension. That the articular adhesions of the joint became more strongly re-established must be reasonably inferred. The paralysis of the leg and the hyperæsthesia of the foot dated from that misjudged attempt.

How this injury upon the nerves of the leg was inflicted was difficult to understand. On post-mortem examination, the nerves were found to be continuous, and though of rather yellowish color, they seemed to be otherwise intact. Yet the suddenness in which the paralysis was provoked, leaves no doubt as to structural interruptions; whereas the hyperæsthesia remains unaccounted for.

That the sloughing of the integuments around the joint and the dermal disease of the foot were entirely dependent on the absence of nervous power requires no further proof.

I can well imagine that some surgeons will differ with me in the propriety of the amputation in the preceding case and I am inclined to concede a liberal latitude for criticism, in which I have indulged myself in the preceding statement.

I certainly admit that, surgically speaking, there were no absolute or passive indications to a capital operation. The desire of the patient or the consent of her husband, *per se*, are of course necessary but not sufficient pretext. Yet I hold that if a limb is susceptible of no improvement whatever, if it is an incumbrance to locomotion and in the way of artificial substitutes, and at that painful and troublesome to the possessor, the surgeon is authorized to remove it. The more rational after treatment of patients after amputations, have considerably improved the statistical tables of mortality, and the risks of capital operations have proportionately lessened.

* These examinations were instituted by Dr. S. Fleet Spier, the curator of the Pathological Museum of the Brooklyn City Hospital.

Researches on the Medical Properties and Applications of

PROTOXIDE OF NITROGEN, NITROUS OXIDE OR LAUGHING GAS.

By George J. Zeigler, M.D.,

Of Philadelphia.

III.—Medicinal Properties and Applications of Protoxide of Nitrogen.

Continued from Vol. XII., p. 121.

4. As an *anæsthetic*, protoxide of nitrogen is also unique, differing essentially from all other agents of the kind in chemical constitution, physical properties, and physiological influences, for these latter are not only chemically dissimilar, but always more or less directly sedative in their action upon the animal organism; whereas, the former is *ab initio*, primarily and permanently stimulant, not even being followed, unless in exceptional cases, with any of that languor or depression so peculiar to the others. Thus, for instance, in regard to constitution, while all other anæsthetics are composed principally of the elements hydrogen and carbon, the sole and exclusive constituents of nitrous oxide are oxygen and nitrogen. Besides in their relative effects upon the living economy there is as great a disparity between protoxide of nitrogen and all other agents employed for the production of insensibility as there is in composition. This is especially manifest in the action of those representative anæsthetics,—chloroform and ether, for the former as elsewhere stated,* not only directly prevent aeration of the blood, but, doubtless, also deoxidises that fluid and diminishes general chemico-organic action, stupifies the brain, depresses the nervous system, causes relaxation of the muscular and other tissues, paralyses the heart, and thus produces death; its tendency being, in fact, to prostrate the vital energies and destroy life by direct and positive sedation; while ether though primarily somewhat stimulant to the brain and nervous system, and less immediately active in arresting oxidation and metamorphosis, and in inducing insensibility, stupor, and paralysis, is yet ultimately depressing and destructive, much in the same way as its congener. Hence the process anæsthetization as thus accomplished, is a process of devitalization, and the anæsthetic condition a state of suspended animation artificially produced, the truth of which is demonstrated by the fact that this, approximate or partial, often proceeds, notwithstanding the utmost care, to complete and absolute death. These agents are, therefore, positive and powerful sedatives if not altogether in their immediate, certainly in their more ultimate effects.

The physiological influence of nitrous oxide is, however, the reverse of this, for, instead of retarding, it, on the contrary, increases oxidation of the fluids and solids of the body, stimulates the brain and nervous system augments general and special sensibility, excites muscular and general contractility, accelerates molecular metamorphosis, promotes general nutritive and vital action, invigorates the whole system and acts as a true tonic. Its effects in these respects are indeed, so well marked as to place it in direct antagonism to the various sedatives and render it very efficient in not only counteracting their depressing influence by direct stimulation, but also to some extent as an antidote thereto. There is, therefore, a wide difference both in constitution and properties between these respective agents and nitrous oxide; for, while the former arrests, the latter promotes and intensifies life action.

But it may be asked, if such is the case, how comes it that protoxide of nitrogen acts as an anæsthetic at all? for it is well established that it will produce insensibility, a fact long since observed by Sir Humphrey Davy,* and abundantly verified by recent experimentation. This effect of nitrous oxide was indeed so apparent to Davy, that it led him to suggest its applicability for the relief of pain from surgical operations as the following extract from his work will show.† "As nitrous oxide in its extensive operation appears capable of destroying physical pain, it may probably be used with advantage during surgical operations in which no great effusion of blood takes place."

Notwithstanding, however, this recognition of the property of nitrous oxide to cause insensibility and his suggestion for its employment to allay pain, it does not appear that Davy, himself, either made, or urged others to make, any practical application of his thought, and much less foresaw its extreme usefulness in this direction; nor even that he sufficiently appreciated the importance of the fact to induce him to further examine the subject. With Davy, therefore, this was apparently but a mere casual observation and suggestion without special investigation or apprehension of the anæsthetic properties of nitrous oxide or general anæsthesia. But it was far otherwise with another to whom must be accredited the wonderful discovery of anæsthesia, both on the principle of a

* Dental Cosmos.

* Vide Researches on Nitrous Oxide. † Ibid, p. 339.

priori appreciation and *a posteriori* demonstration. This was Dr. HORACE WELLS, whose mind from the first was deeply impressed with the idea of the possibility of speedily producing general insensibility in order to render operations painless, and the belief that some means existed whereby this might be promptly effected and suffering thereby completely obviated. This conviction led to research and the moment the fact was presented to him that nitrous oxide was capable of producing insensibility it was seized upon with avidity, and the practical application immediately made by an experimentum crusis on his own person in having a large molar tooth extracted while under its influence, which, as he anticipated, was effected without pain, thus proving conclusively the correctness of his preconceptions respecting the feasibility of anæsthesia.

With regard, therefore, to the relative merits of these pioneers of anæsthesia there can be little doubt, for while Sir HUMPHREY DAVY is clearly entitled to the credit of having first observed the anæsthetic properties of nitrous oxide, and suggested its application for the relief of pain in surgical operations, to Dr. HORACE WELLS is unquestionably due the immortal honor of having make the first practical demonstration of anæsthesia by means of this agent, its primary selection for the purpose being apparently more the result of accident than design, for it is very doubtful whether he had any previous knowledge of DAVY's observation, or had ever before even thought of nitrous oxide in connection with anæsthesia. His claim rests, therefore, upon originality of conception as well as priority of exposition and practical application of anæsthesia. This great discovery was thus the direct product of preconceived thought and intelligent research on the part of Dr. WELLS, to whom the world is thereby so largely indebted that it cannot, by any posthumous honors, do more than acknowledge its obligations for benefits conferred, yet may, to some extent, manifest its gratitude by an ample endowment for the support of his bereaved and indigent family, which it is hoped will be speedily done.

But to return from this digressive though pertinent inquiry respecting the discovery of anæsthesia to the consideration of the modus operandi of nitrous oxide in the production of insensibility. As before stated, the ordinary effects of protoxide of nitrogen upon the animal economy are actively and permanently stimulant, accelerating all the vital operations by increasing chemico-organic and bio-dynamic action. Thus while chemically it rapidly arterializes the blood and promotes elemental interchange, molecular activity and organic metamorphosis, dynamically it stimulates the nervous system, sensorium and general functions of life. But when taken freely the physiological processes are accelerated to such a degree as to temporarily overcome systemic excitability and cause partial interruption of vital activity from overstimulation, the stimulus overbalancing excitability or the momentum being greater than the velocity, on the same principle as without exhaustion a horse may be "taken off its feet," and its pace materially diminished by immoderate driving, the impetus being greater than its capacity for speed. Besides this there may probably be such an abundance of carbonic acid engendered by the energetic oxidation as to check in some measure chemico-organic reaction and dynamization, and thus induce vital inertia and insensibility. Dynamically the sensorial centres may also be so greatly over-excited as to be unable to respond to any additional stimulus, or their functions be partially suspended by local hyperæmia from undue activity of the organs concerned in innervation and circulation, as well as from the excessive quantity of carbonic acid from superoxidation. Moreover some of the effects of nitrous oxide may result from the compounds of nitrogen with hydrogen and carbon as ammonia, cyanogen, etc., they being of a mixed stimulant and tranquillizing character. In these and perhaps also some other more occult modes, sentient impressibility may be so materially diminished by protoxide of nitrogen as to cause partial or even entire suspension of sensibility and consciousness. This power of nitrous oxide to produce anæsthesia by superoxidation, overstimulation, etc., is quite distinct from that of all other agents more especially of the hydro-carbonaceous variety, for they induce the anæsthetic condition by non-oxidation and deoxidation of system, and by directly checking chemico-organic reaction and annihilating sensibility and consciousness. The former, therefore, increases while the latter diminishes life action, with in both instances, the same general result of insensibility of body and unconsciousness of mind, though relatively as different in character from each other as sleep is from stupor or satiety from starvation.

The anæsthetic effect of protoxide of nitrogen is therefore the result of vital exaltation instead of depression being similar in character to that

state of impassibility to injury engendered by exquisite pleasure, moral exaltation, great mental preoccupation and excitement, or undue concentration of nervous energy upon any one part of the system with diminished sensibility elsewhere, and vigorous tonicity of body, examples of which are presented in numerous physiological and pathological conditions, as for instance, in the exaggerated feeling with concomitant systemic insensibility of high social, religious, or political enthusiasm, and other powerful emotional states variously exhibited in the indifference to pain during spiritual abstraction or inspiration, heroic passion, fanatical frenzy, ecstacy, and to a certain extent, in hysteria, insanity and analogous disorders, in all of which there is frequently more or less perfect analgesia without coincident nor seldom even any great degree of subsequent depression, but sometimes only a mere feeling of lassitude with an active tendency to renewed energy. Thus ordinarily with the anæsthetic action of nitrous oxide, which instead of being attended with concomitant or reactive sedation is usually followed by increased vital power, neither its immediate nor ultimate effects commonly causing any temporary prostration or permanent debility, but generally on the contrary, invigoration of both body and mind.

(To be continued.)

Hospital Reports.

Philadelphia Hospital,
October, 1864.

Surgical Clinic of Dr. D. Hayes Agnew.

Reported by W. H. Ford, M. D., Resident Physician.

Scrofula.

J. D., Virginia, æt. 19. He states that he has always been well until about three or four months ago, when swellings began to form about his neck. These swellings, situated along the border of the sterno-cleido-mastoideus, seem to be lymphatic glands in different degrees of disintegration. Two of these tumors are well developed chronic abscesses. They cannot be confounded with fatty or fibrous tumors, for they are soft and fluctuating, and neither of the above suppurate. They cannot be mistaken for carcinomatous growths which ulcerate but do not suppurate; nor for an aneurism as there is no pulsation, and they are not in the proper situation for an aneurism. They are situated along the line of the lymphatic glands of the neck, and are soft and fluctuating. There is no pain, redness or preternatural heat. They have been gradually developed without any febrile symptoms. Upon introducing the exploring needle a thin sero-purulent fluid exudes. The case then is one of chronic abscesses depending upon a scrofulous diathesis, and hence constitutional treatment is indispensable to the cure of this affection. There is at first an inflammatory enlargement of the gland, then a deposit of scrofulous matter, then a disintegration or breaking down of the mass, producing an abscess; an enlargement of the abscess takes place by a gradual breaking down of the sac.

Treatment. The general treatment consists of good nutritious diet, fresh air, tonics and alteratives, such as quinia, chinchona, iron, cod liver oil, cod liver oil combined with iodide of iron, etc., etc. The abscess should not be interfered with too soon.

When the sac must be opened it should be done by a valvular incision (as in the present case) that the air may not enter the sac and produce severe inflammation. A compress and adhesive plaster are applied to maintain pressure.

Troublesome constitutional disturbance sometimes follows the incautious lancing of a cold abscess.

Gonorrhœa.

S. C., æt. 22, always enjoyed good health. About four days after illicit intercourse the patient first experienced the premonitory symptoms of gonorrhœa, which were pruritus, and slight swelling about the meatus urinarius, and a slight serous discharge. The disease has now advanced to the inflammatory stage. There is a purulent discharge of a greenish color, The glans penis is swollen and its mucous membrane and that of the prepuce is inflamed and slightly excoriated. The urine is passed with difficulty on account of the tumefaction of the parts. There is pain and scalding during micturition, and some soreness along the corpus spongiosum. Ordinarily, the inflammation does not extend into the urethra further than the fossa navicularis; but in neglected cases it may extend to the kidneys and testes, producing the most disastrous results. The premonitory symptoms usually occur about forty-eight hours after impure connection, but the latent period is sometimes as long as ten days.

Treatment. The remedies for this affection are very numerous. We must rid ourselves of the idea that there is anything specific about this disease. It is merely an inflammation of the mucous membrane of the urethra, which we are to treat upon general principles.

Rest in the recumbent posture, restricted diet, saline cathartics, and small doses of antimony if there be febrile symptoms, are important adjuvants in the treatment of gonorrhœa. The penis should be enveloped in a dressing of lead water and laudanum, and it and the scrotum should be supported. The discharges must be washed out with injections of tepid water. The patient should drink demulcent fluids in which may be mingled some alkali to relieve the scalding which depends upon the acidity of the urine.

When the inflammatory symptoms have become mitigated, we begin injections of a weak solution of nitrate of silver, (one-fourth of a grain to an ounce of water,) or of sulphate of zinc, (one grain to an ounce of water,) gradually increasing its strength to ten or fifteen grains. The injection of nitrate of silver is always to be preceded by an injection of tepid water. By the use of this plan of treatment a cure is completed in three or four weeks. Such a result is rarely to be obtained in less time.

The so-called abortive treatment from which stricture, orchitis, and other complications so often result, is now falling into merited disuse among respectable practitioners.

Phymosis as a sequence of Gonorrhœa.

J. R., æt 28, laborer. Last July the patient had a severe gonorrhœa, followed by phymosis which he has had ever since. Phymosis is a preternatural contraction of the prepuce. The result of the inflammation of the mucous membrane of the glans penis, (balinitis,) and of the prepuce, (posthitis,) which may be produced by either gonorrhœa or chancre.

Treatment. For the relief of this affection, several operations are performed.

1st. Simple division of the internal membrane of the prepuce, when the phymosis is due to the constriction of this membrane alone. 2d. Division of the prepuce upon its superior surface. 3d. Circumcision.

We will perform the second operation in this case.

Operation. A groove-director is introduced between the foreskin and glans penis, and a sharp pointed bistoury is passed along the groove the prepuce transfixed, and the parts divided from above downward. The mucous membrane is then divided by a knife or scisssors, the skin and mucous membrane are carefully brought together by several interrupted stitches, the first one being placed at the angle of the wound. Tepid water dressing is applied. But a few days will suffice for the healing of the parts and the cure of the patient.

Ununited Fracture of the Tibia treated by Dieffenbach's Method.

H. R., Ireland, æt. 28. About five months ago this woman received a fall by which the tibia of the right leg was fractured. It was a simple fracture and the treatment was properly conducted, but it has refused to unite, and now we have a condition of the parts called pseudarthrosis, or false joint.

Causes. There are many causes which prevent the proper union of a fracture. 1st. Injudicious action of the patient. 2d. Injudicious treatment—improper adjustment of the parts being included under this head. 3d. Intervention of substances between the ends of the fragments. 4th. Enfeebled constitution—that is inability of the system on account of age or disease, to furnish the necessary amount of reparative material to consolidate the parts. 5th. Comminuted fracture. Sometimes the extremities of the bones are rounded off and become encrusted with a cartilaginous substance, and hence a kind of false joint. Sometimes a cavity is formed in the end of one of the fragments in which the end of the other plays, forming a kind of enarthrodial joint. Sometimes there is only a fibro-cartilaginous union between the bones, thus allowing motion.

Delayed union depending upon a debilitated constitution is sometimes mistaken for non-union depending upon other causes. Time and tonics will develop the mistake.

Treatment. There are several methods for producing the union of ununited fractures. 1st. Friction of the ends of the fragments, as first recommended by CELSUS. 2d. SMITH'S apparatus by which friction of the ends of the bone is produced while the patient is walking about in the open air. 3d. PHYSICK'S method, which consists in the introduction of a seton between the ends of the fragments. 4th. Cauterization over the seat of fracture, commonly known as HARTSHORN'S plan. 5th. DIEFFENBACH'S method. 6th. BRAINARD'S operation, which consists in drilling subcutaneously the ends of the fragments until sufficient inflammatory action is aroused to produce the desired results. 7th. Cutting down upon the bones, drawing them out, and sawing off their extremities and wiring them together, This is a severe operation, but it has succeeded better and oftener in these old cases of ununited fracture than any of the above in Dr. AGNEW'S hands. As the present case is not of long duration, DIEFFENBACH'S plan will be tried. A hole is drilled in the extremity of each fragment and two ivory pegs about two inches long are forcibly driven into the bones. These pegs are to be retained until sufficient irritation is produced to insure the union of the parts. In this case, probably four or five days will be sufficient time. We apply adhesive plaster over the parts and will envelope the limb in a starch bandage, after the removal of the pegs.

EDITORIAL DEPARTMENT.

Periscope.

A Review of some Remarks of Professor Longmore. Deputy Inspector-General British Army, on the Treatment of Gunshot Wounds of the Chest by Hermetically Sealing.

By B. Howard, M. D., Army of the Potomac.

[Continued from page 259.]

Respecting closure of the external wound in cases of extreme hemorrhage, the surgeon will sometimes find it necessary to desist from this course, on account of the presure of the accumulating blood upon the lungs, and its crowding of the heart. In such a case he must endeavor to preserve the balance of life by watching on which side the scale—whether from exhaustion from loss of blood, or asphyxia from compression of the vital organs—the downward tendency prevails.

Although the danger from asphyxia may be uncreased by closure of the external wound, the danger from a hemorrhage may be so much *more* diminished, as to reduce greatly the aggregate risk of life; meanwhile, the lung may become inceasingly tolerant, and the vital powers be so resuscitated as to improve the prospects of ultimate recovery.

The relief to dyspnœa from access of air through a gunshot wound of the chest is so uniformly secured by its closure as to need no comment, I will, therefore, pass on to consider some of the remarks of Prof. Longmore under the head of suppuration.

Prof. Longmore inquires, if we can expect a diminution or prevention of suppuration by shutting out external air, adding—"This is doubtless the case with incised wounds, but can we expect it to be with penetrating gunshot wounds?"

Is there anything in a gunshot wound not found in an incised wound of the lung which diminishes the suppurative effects promoted by the action of atmospheric air upon it? Does the gunshot wound confer the immunity upon the pleural lining of the cavity wounded, to the continuous action of atmospheric air upon it? If not, why is it not as injurious in a gunshot, as the case of an incised wound; and therefore, its exclusion of as much importance in the former case as in the latter?

The difference between the two cases is undoubtedly this, that in the gunshot wound the injury is of greater gravity, and of a nature rendering the parts peculiarly obnoxious to the deleterious action of atmospheric air, rendering its exclusion therefore so much the more desirable.

In an incised wound of the lung, the pleura and lung are (excepting the wound) in an otherwise healthy condition, the admission of air by compressing the lung, would not prevent apposition of the cut surfaces, but it would have a tendency to excite "general pleuritis and promote pleuro-pneumonia."

But in a gunshot wound of the same parts, we find in addition to this, a varying amount of contused, sphacelating and dead tissue, besides a greater liability to the presence of foreign bodies, spiculæ of bone, pieces of clothing, etc.

The passage of renewed currents of oxygen through the whole track of the ball, and circulating throughout the pleural cavity, induces exaggerated sloughing, and increases the amount of tissue invaded, by the preliminary inflammation it excites in the neighborhood of the wound.

The whole extent of the pleura being suddenly and continuously subjected to the same irritating cause, it becomes thickened and softened throughout, breaking down readily under the touch; the pus and blood in the cavity also becomes extremely fetid from the same cause, and a chemical is superadded to a mechanical irritant; this exerts an influence immediately depressing to the vital powers, the degree of which is proportioned to the frequency, rather than the volume of the repeated currents of oxygen to which the parts have been exposed.

Is it not evident that the longer we can exclude these currents of air without incurring any greater danger from compression, we delay, in the same degree, the legitimate effects of their presence.

The known existence of certain causes of irritation and suppuration, such as spiculæ of bone, pieces of clothing, etc., which may have been carried into the pleural cavity, are only additional reasons for limiting the amount of every other cause of irritation and suppuration as much as possible, and delaying that amount of it which may be unavoidable, to as late a period as practicable, in order that in the meantime, the constitutional powers may be rallied for the coming conflict.

It is strange Prof. Longmore should have devoted so much space to the condemnation of a hypothesis of his own construction, viz.: that of allowing no means of exit for the pent-up discharges. The attributing such an idea to me must have resulted from a great oversight, as in the article referred to appears the following, in a distinct and separate paragraph:

"Should suppuration occur so as to occasion distressing dyspnœa, proceed to treat it in all respects as a case of empyema, introducing the trocar at the most dependent point, and taking special care to avoid the admission of air."

The entire plan of treatment I have ever based upon these two main points, exclusion of atmospheric air, and removal of collecting fluids, etc., principles which, I think, are fully in accordance with the inductions of science. The great trouble has ever been in the difficulty of carrying them out in practice; and it is this that I have labored in some measure to overcome. Should I fail in my immediate object, I still have hope that my endeavors may conduce to such modifications in treatment as shall minister to the benefit of the patient, and help by exclusion to diminish the area of doubt and uncertainty surrounding the treatment of this class of cases and save future trouble to some one similarly impressed of repeating the same attempts.

As to the operation which I described in the article referred to being "*new*," that is a matter of very little concern. Although, however, Prof. Longmore has chosen to contest that point which indeed I did not then claim; he has not shown that it was ever performed or proposed before, or that any attempt had previously been made by such means to obtain healing of a gunshot wound by first intention.

It is my intention to enter into further particulars, and give definitely my views on this subject as soon as convenient; I think they will appear to be in harmony with established principles, although involving modifications in their application.

The exclusion of all foreign bodies from the pleural cavity; accumulating fluids, no less than atmospheric air. This, so far as practicable, is my aim. The common fault in practice has been an undue attempt to accomplish the former by inadequate means to the improper neglect of the latter. Whereas, both should be together attempted with such modifications as each particular case may demand, in order to counteract the most evident tendency to death from either cause respectively.

MEDICAL AND SURGICAL REPORTER.

PHILADELPHIA, FEBRUARY 4, 1865.

THE AFTER-DINNER CIGAR.

Since King JAMES wrote his "Counterblast to Tobacco," many volumes have been written in opposition to its use. Poor RICHARD has referred to the expense of the habit; others have drawn pictures of blindness, apoplexy and paralysis as resulting from it. Social and moral argument have been exhausted yet an enormous consumption of tobacco continues, and is alarmingly on the increase in this country. High tariffs may have diminished the quantity imported, but the domestic production has been greatly increased. Many a rich valley throughout the Western, Middle, and New England States whose luxuriant meadows and fertile hillsides fed hundreds annually, with their abundant yield of wheat and Indian corn before the war commenced, has been turned to the almost exclusive production of a poison for the gratification of a pernicious habit. "After all the moral and sanitary tornadoes that have burst upon the lazy fire that burns at the human mouth, it still burns on, and the most Puritan fields are gradually coming to pay tribute to it."

While physicians and ministers of God's Holy Word, the guardians of our temporal and eternal happiness, encourage the vice by precept and example, the consumption of tobacco will increase, the tendency of tariffs and taxes to the contrary notwithstanding. Physicians assist greatly in forming public opinion and as long as teachers of medicine continue to take great pains to impress upon the minds of the hundreds of students who annually listen to their instructions, that alcohol and tobacco are food, so long will their use as such be continued, and so long will the practitioner of medicine, whose eyes are not closed by being himself a slave to their influence, in his daily round of visits, witness the consequence in broken healths, broken characters and broken fortunes—in ruin temporal and eternal.

It is claimed for alcohol that it is *force*, that it possesses the power of sustaining a man under mental or corporal labor. Food is force, it is, therefore, argued that alcohol being force and food being force alcohol must be food—"two things being equal to a third, are equal to each other." Without denying that alcohol is force, we would question the propriety of using so mathematical a course of reasoning to establish its right to be considered food. Charcoal is carbon, the diamond is carbon, yet charcoal is not diamond. It is, therefore, plain that mathematical reasoning cannot be applied to the demonstration of a chemical truth. "A clever man," says Sir JOHN HERSCHELL as quoted by PROUT, "shut up alone and allowed unlimited time, might reason out for himself all the truths of mathematics, by proceeding from those simple notions of space and number, of which he cannot divest himself without ceasing to think; but he would never tell by any effort of reasoning what would become of a lump of sugar if immersed in water, or what impression would be produced on his eye by mixing the colors yellow and blue." Our knowledge of the functions of animal organisms, and all connected therewith, is as much the creature of actual experimental research as is our knowledge of chemistry, and just as little as reasoning can be made to demonstrate a truth in chemistry can it be made to establish a fact in physiology.

But tobacco has not even the claim that it has force to recommend it; a man with a pipe in his mouth requires the same amount of food to perform a given amount of labor that he does without it. Few, we suppose, would have the boldness to say that smoking tobacco repairs wasted tissue. Its defenders are, therefore, driven back upon the old argument, that man's instinct would never have led him toward it had not the Great Creator intended it for his use, and the "after-dinner cigar" after receiving a place among the articles of diet is given the credit of, at least, promoting digestion by increasing the salivary secretion.

Nothing was known in the Old World of the use of tobacco before its introduction from America. In 1492 Columbus first witnessed the smoking of cigars in the West Indies. How did all civilized mankind digest its dinners before that day? Dyspepsia must have been an all-prevailing disease! That the human "instinct" was extremely dull in this particular case is evident from the very slow manner in which Europe acquired a taste for the use of this weed which the slaves of tobacco of the present day, would lead us to suppose is so essential to human health and happiness. Scarcely anything was known of this foreign vegetable so late as 1560, when JOHN NICOT (from whose name the generic appellation *Nicotiana* is derived) the French ambassador at the Court of Portugal, into which country it had been introduced by HERNANDEZ DE TOLEDO, reported

it to his sovereign. Instead of the men who accompanied Columbus having taken to any imitation of the West Indian natives when they returned to Europe, we have good authority for stating that the adoption of the pipe is attributable to an Englishman who first accustomed himself to the habit in Virginia. Sir Walter Raleigh did not use the pipe until after the return of Sir Francis Drake, with the colonists from Virginia, in 1586. A century, therefore, nearly elapsed before even the seeds of the habit found lodgment among any European people, and the rapidity with which the practice afterwards spread, is much more probably attributable to the opposition and persecution to which it was almost immediately exposed than to the discovery of any benefit arising from its use. Lizars says, "If it is true, as has been said, that a few opposing volumes will fix the roots of a heresy, we need scarcely wonder at the triumph of tobacco, against the use of which more than a hundred fulminating volumes issued from the press within a few years." The fact that the custom of smoking tobacco was common among the American savages does not alter the conclusions to be drawn from that of the tardy appreciation of civilized Europe of the assumed virtues of the weed. There is no reason whatever to suppose that savages always follow the first dictates of nature. Vice, although unfortunately, a too general companion of civilization is not peculiar to it. If man's customs uninfluenced by civilization were to be taken as a proof of nature's intention cannibalism itself could be justified.

Tobacco presents the peculiarity of possessing two active principles. Generally only one is found at the base of any particular production in the vegetable kingdom. The first, *nicotia* or *nicotina* upon which the peculiarities of the plant mainly depend, is an organic volatile alkali, the formula of which is C^{20} H^{14} N^2. As a poison, its activity is equal to that of the strongest prussic acid. Dr. Wood says, tobacco contains from two to about eight per cent. of it according to the quality. The second, *nicotianin*, is a concrete volatile oil, not found in the fresh leaf. According to Pereira, it is developed by the drying of the leaves under the influence of air and water. Dr. Wood says, "Tobacco yields by destructive distillation, an *empyreumatic oil*, which may be obtained colorless by rectification, but becomes brown by time, and, as usually found in the shops, is dark brown or almost black, and of a thickish consistence. It has an acrid taste, and precisely the odor of old tobacco pipes. Two drops of it killed a dog. It is, therefore, very poisonous; but according to the experiments of Brodie, it acts in a manner quite different from tobacco, and must consequently contain an energetic principle not pre-existing in the plant. It is said to contain nicotia."

This is generally supposed to be the leperous distilment alluded to by Shakspeare

"Sleeping within mine orchard
My custom always in the afternoon,
Upon my secure hour thy uncle stole,
With juice of cursed hebenon in a vial,
And in the porches of mine ear did pour
The leperous distilment; whose effect
Holds such an enmity with blood of man,
That swift as quicksilver, it courses through
The natural gates and alleys of the body;
And with a sudden vigor, it doth posset
And curd like eager droppings into milk,
The thin and unwholesome blood: so did it mine."

Is it not more likely that the "juice of cursed hebenon" is a poetic allusion to the very poisonous empyreumatic oil which henbane leaves yield by destructive distillation, than to that of tobacco? The similarity of names and the facts that henbane and its properties have long been known in England, while on the contrary, tobacco, at the time Hamlet was written, was not so generally used as it is now, make it more probable.

The assertion that tobacco assists digestion by increasing the quantity of saliva secreted, is answered by referring to the fact that saliva impregnated with tobacco (and therefore with the poisons just mentioned) and swallowed, produces a sensation of sinking at the pit of the stomach, nausea, vomiting, purging, etc., on account of which nearly all who use tobacco eject their saliva, and thereby instead of having, as is claimed, an increased quantity to assist their digestion they almost entirely lose the benefit of that fluid which performs an office in digestion second only to that of the gastric juice.*

* We would refer the reader to an excellent little volume, a new edition of which has just been issued by Lindsay & Blakiston of this city, entitled "Alcohol and Tobacco. Alcohol: its Place and Power; by James Miller, of Edinburgh; and the Use and Abuse of Tobacco; by John Lizars." The medical profession know both these gentlemen well by reputation as professors in the University of Edinburgh.

THE MEDICAL SOCIETY OF NEW JERSEY.

We had the pleasure of attending the ninety-ninth annual meeting of the Medical Society of New Jersey, at Burlington, last week. The Society met on the 24th and closed its session the next day. There was an attendance of about fifty delegates and members from all parts of the State, the counties being pretty well represented. We doubt whether there is a State in the Union that sends so general a representation to its State Medical Society as New Jersey. Of the twenty-one counties in the State, there are but three or four that do not possess active societies. In medical organization New Jersey is certainly the model State of the Union. There is a system in the plan of organization of the State Society, which favors the transaction of business, and thus shortens the sessions. There was quite as much business transacted at the late meeting of one evening and one day's continuance, as is often transacted in sessions of three days in other societies at much expense and loss of time to the members. Yet we are not in favor of such short sessions of our State Medical Societies, but would much rather see them prolonged, and more time given to scientific discussions, and to the sociable feature of the meetings.

The Society was organized on Tuesday evening, January 24th, the President, Dr. E. M. HUNT, of Middlesex, in the Chair. The annual address was made the first order of business the next morning. In this address Dr. HUNT certainly achieved a great success. It was admitted by all, we believe, that it was a performance, in every respect, of unusual merit, and the Society showed its appreciation of it by voting to have five hundred copies printed separate from the Transactions. We believe this is the first time that such a compliment has been paid by the Medical Society of New Jersey to one of its Presidents. Dr. HUNT's subject was "Medicine—the Science, the Art, and the Practice." We shall not attempt to give an analysis of it until it is issued from the press.

Delegates were present from the State Medical Societies of Pennsylvania and New York. Pennsylvania sent a full delegation in the persons of Drs. HIRAM CORSON, of Montgomery Co., TRAILL GREEN, of Easton, and WM. MAYBURRY, of this city. New York was represented by Dr. E. S. F. ARNOLD, of Yonkers. Dr. J. H. GRISCOM, of New York City was also present, though not as a delegate. The delegations addressed the Society in a few felicitous remarks. In his response to the addresses of the delegates, the President was peculiarly happy.

The report of the Standing Committee of the Society, comprising a digest of the reports from the several districts (or counties) was read, and presented at a glance, a medical history of the State for the past year. This feature of the Medical Society of New Jersey is a unique one and its excellence has never been so forcibly illustrated as since the present efficient Chairman, Dr. STEPHEN WICKES, of Orange, has been its representative. The Society, finding that Dr. WICKES, has done his work so well, has shown its appreciation of his usefulness by retaining him in the position for several years. He has done good service in the cause of medical progress in New Jersey. On another occasion we propose to say more of this feature in the organization of the Medical Society of New Jersey.

The annual essay, a very excellent paper, was read by Dr. STEVENSON, of Camden. A report was read by a committee appointed last year to revise the by-laws of the Society. The work was well done, and the by-laws much simplified and improved. Dr. ABRAHAM COLES, of Newark, was elected President for the ensuing year. The next meeting of the Society will be held in New Brunswick, and as it will be the centennial meeting, it will be an occasion of very great interest and it is proposed to celebrate it in a manner becoming so important and interesting an occasion.

The business of the meeting having been brought to a close the Society, as is customary on such occasions, adjourned to another apartment to dinner. This part of the meeting presented little that was worthy of discussion, but what little there was, was finally disposed of, and the Society adjourned *sine die*, and the members scattered to their homes, carrying with them pleasant remembrances of the ninety-ninth annual meeting of the Medical Society of New Jersey.

Notes and Comments.

Small-Pox.

The small-pox has been prevailing very extensively for some time past, as is shown by the numerous applications at our office for vaccine virus. There is a great deal of variola in most of our large cities. At the Health Office in this city, there were twenty deaths reported for the week

ending on the 28th ult., and the City Registrar of New York reports twenty-six deaths in that city for the same week, and the Health Officer of Brooklyn, reports eight. It is well known that this disease has prevailed very extensively in New York and Brooklyn, so much so, as to attract the attention of the authorities. This prevalence of small-pox is disgraceful to our municipal and State governments, and it is hoped that effective measures will be taken to control the spread of the disease.

In New Orleans the disease seems to be epidemic. A private letter from that city, dated January 8, says: "The small-pox has come to alarm the people to an extent only second to the worst ravages of the yellow fever. There are not less than fifteen hundred cases in the city and vicinity at this time, and it is by no means on the decrease. More than one hundred patients have been admitted into the hospitals in one day, and the average now is not far from seventy-five a day. An extensive small-pox hospital is just completed on the extreme outskirts of the city, in the vicinity of the Marine Hospital, which is capable of accommodating five hundred patients. It comprises five buildings one hundred and sixty feet long by twenty-four wide."

We trust that those who have have received vaccine virus from us, will make prompt and liberal returns, as there is a great demand for it from every section of the country.

Pennsylvania Hospital.

We learn that Dr Francis G. Smith has resigned the position of Physician to the Pennsylvania Hospital, which he has filled with so much credit. The trustees have filled the vacancy thus caused, by the appointment of Dr J. M. DaCosta, the very best selection that they could have made. On being elected to this position, Dr. DaCosta at once severed his connection with the Philadelphia Hospital, where he served very acceptably for several years.

Weber's Anatomical Atlas.

Several physicians have made inquiry concerning some full length lithographs of the human skeleton that are hanging in our office. They are a portion of a series belonging to Weber's Anatomical Atlas, published some years since by Endicott, of New York.

We learn from Endicott & Co., that the lithographs were destroyed by fire some years ince, but that they have a few incomplete sets. lacking the three colored figures showing the veins and arteries.

These figures, being in fact, full length maps, make a very appropriate decoration for a physician's office. and we trust that Endicott, or some other engraver will reproduce them complete.

The Smithsonian Institute.

Last week the country and the world met with a sad loss in the destruction by fire of a portion of the valuable contents of the building of the Smithsonian Institute at Washington. The loss was chiefly in the valuable scientific apparatus and records of the establishment, and in the gallery of Indian portraits. Happily the library and museum escaped with comparatively little damage. Among the losses, we see it stated, were some important papers prepared by Drs. Leidy and Wood of this city. It is to be hoped that these gentlemen have retained copies so that they can be replaced.

Correspondence.

FOREIGN.

LETTERS FROM Dr. W. N. COTE.

Paris, *Sept.* 30, 1864.

The Woorali Poison.

The Woorali poison or *curare*, which the South American Indians poison their arrows with, forms the subject of an interesting paper by Dr. Claude Bernard, in the *Revue des Deux-Mondes*. It is well known that this poison, though harmless when introduced into the stomach, causes universal paralysis when thrown into the current of the circulation by the infliction of a wound, and that death ensues within a few minutes, more or less, according to the size of the animal. So certain is the deadly effect of this poison known to be, that when an Indian happens accidently to wound himself with one of his own arrows, he simply lays himself down to die without making the slightest attempt to save himself by the application of an antidote; and as death comes on without any visible struggle, it is universally believed that the victim suffers no pain. This notion, however, Dr. Cl. Bernard shows to be utterly erroneous, because the paralysis creeps gradually on from limb to limb, depriving the animal of motion, and yet without, in the slightest degree, affecting its intellectual faculties or power of volition, which remain un-

impaired to the last moment. Now this he considers to be one of the greatest tortures to which an intelligent being can be subjected; indeed it has often been depicted by VIRGIL, TASSO, and other persons in their descriptions of persons transformed into trees or other inanimate objects, and therefore deprived of the organs by which they might give effect to their will, which latter, however, with every other intellectual faculty, remains in them as strong as ever. Dr. CL. BERNARD then proceeds to establish the proximate cause of the animal's death by woorali, or *curare*, as it is called in France—this is no other than the gradual extension of paralysis to the respiratory organs, which thereby cease to provide the blood with the quantity of oxygen it requires. This being the case, the distinguished physiologist goes a step further and shows that the poisoned animal may be restored to life by the mechanical injection of air into the lungs, an operation for which science is provided with every necessary apparatus. This important fact he proves by actual experiment and adds, that by this process time is given to the organs to eliminate the poison by the ordinary functions, so that in the course of a few hours the animal will recover. Another means of cure is a ligature effected above the wound, so as to prevent the poison from being carried to the heart by the circulation of the blood. The ligature may be alternately slackened and tightened, so as to allow small portions of the poison to penetrate into the blood vessels by degrees, allowing time for each portion to be eliminated before another is admitted, and thus, in the course of about twelve hours, the whole of the poison is eliminated.

Artificial Petrifaction of Animal Bodies.

About twenty-five years ago the scientific world was surprised by an announcement to the effect that a Venetian, named GIROLAMO SEGATO, had discovered a means of reducing dead bodies to a state of hardness closely approaching that of stone, except at the joints, where he had succeeded in maintaining a certain degree of pliancy. The results obtained by M. SEGATO in this direction were altogether wonderful, and many strangers used to visit his collection at Florence, where he had settled. Nevertheless he was not encouraged; first, on account of his political principles, and secondly, because the clerical party, which was then all-powerful, got up a cry of impiety against him. His secret found no purchasers, and he died in consequence of a complaint he had contracted in visiting some of the wildest parts of Africa. A short time after his death, the late Abbé FRANCISCO BALDACCONI, Director of the Museum of Natural History at Siena, obtained certain results which led to very strong hopes that SEGATO's secret might be re-discovered. M. BALDACCONI's process consisted in steeping the anatomical specimen for several weeks in a solution of equal parts of corrosive sublimate and sal ammoniac, a mixture, which by the earlier chemists was called *sal alembroth*; and in 1844, a liver thus prepared was sent over by him to the Academy of Sciences here. This specimen had acquired the consistence of steatite, or serpentine, and was perfectly incorruptible. The Italian papers now state that a Sardinian naturalist, Professor MARINI, has re-discovered SEGATO's secret. His process is also kept a secret, but from description it appears that he obtains still more remarkable results than his predecessor. He has constructed a small table entirely composed of petrified animal substances, namely, brain, blood and gaul, and having quite the appearance and consistence of broccia. His preparations are incorruptible, they preserve their natural color, and will resume their original state on being immersed in water for some time. Professor MARINI intends shortly to exhibit his preparations in Paris.

International Sanitary Congress.

The Swiss Federal Council has received fresh adhesions to the treaty for medical aid to the wounded decided on by the International Congress which recently met at Geneva. The Hellenic Government has manifested its regrets at not having been able to have itself represented at that assembly. In expressing ardent wishes for the full success of so civilizing and eminently humane a work, it reserves to itself to give its adhesion to the conclusions of the Congress. Turkey also announces her approbation. The delegate who left Constantinople, arrived too late to be present at the Geneva Conference. The Emperor of Mexico has expressed to the Federal authority the lively interest which he takes in the work, by declaring that he readily joins in the object proposed. Persia herself, although she had not been invited, has given marks of satisfaction, and the Persian Ambassador in Paris has expressed his regret that the great distance of his country had not permitted it to be represented at the Conference.

Longevity.

The following curious facts are gleaned from a work which has just appeared under the title of

"*De la Longévité Humaine*," by Dr. Guyétant, who has himself reached the patriarchal age of eighty-eight. In 1777 average life in France did not exceed twenty-three years. In 1798 it had risen to twenty-six years and three months. In 1836 it was thirty-three years, and at present it has reached the very high figure of thirty-nine, an increase of six years within a period of twenty-eight years. This is evidently owing, first, to the great efforts made of late to remove unsalubrious nuisances, to provide towns with a proper system of sewerage, to drain marshes, etc., and then the great progress made in medicine, and the abundance of wholesome food and every necessary comfort now at the command of all but the hopelessly indigent, who are of themselves the object of much greater solicitude than formerly.

W. N. Côte.

DOMESTIC.

Intussusception.*

J. B., a colored patient was admitted into the the Quartermaster's Hospital on the evening of September 8th he had been at work until the time of his admission, and appeared to be suffering from a derangement of the bowels. The next morning he ate a hearty breakfast, but during the day was attacked with violent pain in the abdominal region.

About two o'clock one of the nurses noticed him drop down as he was returning from the cinque, which he had just visited; the nurse assisted him into the hospital where, in about ten minutes, he expired.

An autopsy was made and the viscera of the thorax examined, but nothing unusual presented itself in any of the structures contained in that cavity, the heart and lungs appearing natural.

Upon examining the bowels, however. the cause of his sudden death was at once revealed, a retrograde intussusception of the small intestines had occurred in three different places, one about six inches above the ileo-cœcal valve and two more in the upper portion of the jejunum about eight inches apart. In the intussusception of the ileum the bowel was invaginated to the extent of two inches in those of the jejunum about an inch each, the iliac portion of the intestine had evidently been the seat of inflammation for some time, as I squeezed out a quantity of bloody serum which had accumulated above the invaginated portion. No inflammation was observable in the jejunum.

The mesenteric glands were very much enlarged, some of them being the size of a pigeon's egg. This increase in size of the glands was not the result of tubercular deposit as they were not at all hardened and no tubercular matter was visible in any of the other viscera of the body.

As the patient, while living, stammered very much, it was difficult to get any information from him that would point out the true nature of his disease, but a few hours before death he apparently suffered much from pain.

Thomas Byrnes,
Hospital Steward, U. S. A.
Second Corps Hospital,
City Point, Va.

* Originally communicated for the *American Medical Times*.

News and Miscellany.

The New York Hospital Library.

The library of the New York Hospital has recently been enriched by a bequest from the late John Watson, M. D., for many years attending surgeon of that institution. The gift comprises about six hundred volumes of rare and curious works on medical science and kindred topics. They comprise antique black-letter folios and quartos printed two or three centuries ago; recondite treatises on abstruse subjects; chronicles of theories long since exploded, readopted, and exploded again; histories of diseases and their remedies, as they were understood in ages when the disciples of the healing art had little or no knowledge of the principles on which its practice is now founded; pamphlets in learned, dogmatical and oracular style, and many works which the student or antiquary may peruse with interest. By direction of the testator, the hospital was authorized to make its own choice from his rich stores, and the selection was confided to Dr. John L. Vandervoort, a gentleman of high reputation in his profession, who has been for nearly thirty years past the librarian of the New York Hospital. The Hospital Library now numbers about eight thousand volumes.

A New Use for Petroleum.

Dr. Decaisne, of Antwerp, announces that thy itch may be cured instantaneously by simple applying (without rubbing) petroleum to the parts affected. The mere emanations of that oil are sufficient to disinfect the patient's clothes, and Dr. Decaisne adds that all other parasites of the human body may be destroyed immediately by the same means.

A new Tent in Surgery.

The dried stems of the *Laminaria Digitalia*, or sea-tangle, have been introduced and extensively used as a substitute for tents in surgery. They possess the property of being easily bent at any angle required by the operator. Secondly, they absorb moisture from the secretions, and expand to five or six times their size when introduced; and furthermore assume their original straight positions. Sea-tangle has been recommended and used in various uterine affections, especially where there is any obliquity of the organ, and when the surgeon is desirous of dilating the os and cervix uteri.—*Canada Med. Jour.*

Philadelphia Ophthalmic Dispensary.

This Institution, under the charge of PETER D. KEYSER, M.D., is now open daily at the northeast corner of Ninth and Spring Garden streets, for the purpose of affording gratuitous surgical and medical aid and medicines, to the indigent suffering from diseases and affections of the eye. Dr. KEYSER is a graduate of the medical department of the University of Berlin, and comes well recommended. The Dispensary will be kept up by subscriptions from the members and contributions.

Liquefaction of Protoxide of Nitrogen.

One of the most interesting objects at a recent *soirée* at the Paris Observatory consisted in the exhibition of the liquefaction of laughing gas, the protoxide of nitrogen, by M. BIANCHI. This took place at zero Centigrade under a pressure of thirty atmospheres, the fluid issuing in a small jet from a metallic reservoir. Received in a glass tube, it retained its liquid condition by reason of the depression of the temperature produced by evaporation, so that mercury being introduced solidified, and could be hammered like lead. Simultaneously, a body in the state of ignition, plunged into the atmosphere of the liquid, in which the mercury froze, burnt with a brilliant light. On pouring the protoxide into a small platinum capsule heated to redness, the liquid was found to retain all its properties while assuming the spheroidal state, and was still able to freeze mercury contained in little glass ampullæ. Finally, the liquid protoxide became solidified under the recipient of an air-pump, the temperature being reduced to 120° below zero Centigrade—the most intense cold yet obtained. —*Med. News.*

Insults to an aged Professor.

When Sir DAVID BREWSTER delivered the introductory lecture at the opening of the Edinburgh University Session, the conduct of the students was disgraceful. They pelted peas at the Professor, and even the venerable gray hairs of more than eighty years did not protect the lecturer.

Merited Distinction.

We have much pleasure in learning that Dr. MARION SIMS, of New York, who, during the last two years has been resident in Paris, owing to the political convulsions of his country, and whose able contributions to Uterine Surgery are now in course of publication in our columns, has received from the Emperor of the French the knighthood of the Legion of Honor, in recognition of his eminent services to surgery, and his skill and success in his particular department of practice.—*Lancet.*

A Novel Suit.

A novel action was lately brought in Paris by a surgical mechanician, against two medical officers. The latter, Drs. GOUPIL and BURNUTS, have published a book on the diseases of women and therein stated that a peculiar pessary, invented by M. GRANDCOLLOT, did not, so far as they had seen, answer the purpose. The latter thereupon brought the action, laying the damages for the injury sustained at £1,000, requesting besides, an apology in thirty newspapers, and also a rectification to be inserted in the abovementioned work. He, however, lost his cause; the verdict was for the defendants, and the plaintiff was saddled with the costs.—*Canada Med. Jour.*

The Exactions of Quack Doctors.

A hospital surgeon, writing to the "*Times*," relates the following case, which is only a sample of many others;—"A young officer, scarcely of age, was entrapped into giving bills to the amount of £4,000 to an advertising quack. By my recommendation he went to a lawyer, who succeeded in reducing the sum to £200. A second victim gave in hard cash £1,000 for a single prescription; a third, after paying £900 for the same, determined to suspend the remaining £100 until he had consulted me to ascertain his cure. The most incredible part of the whole is, that there was nothing at all the matter with either of these patients except the mental excitement which these miscreants produced, an excitement which I have known in many instances to end in a lunatic asylum. I have often tried to persuade the sufferers to face the charge, but without success, the dread of publicity being so unconquerable."

Two quack doctors in London were recently convicted of conspiracy against a captain of the 50th Regiment. Seeing their advertisement he applied to them and received medicine, for which he appears to have paid roundly. Finding he derived no benefit he discontinued using their prescriptions, when they demanded £150, in default of which they would expose him. The captain resisted, had them arrested, and they were sentenced each to two years' imprisonment at hard labor.—*Canada Med. Jour.*

Army and Navy News.

ARMY.

Compliment to a Medical Director.

The following very flattering letter was recently addressed by Major-General Steedman to Dr. A. C. Jenner, of Alliance, Ohio, Surgeon 5th Regiment O. V. I.;

Headquarters, District of the Etowah,
Chattanooga, *January 18th*, 1865.

Major:

I desire to express to you my thanks for the prompt, efficient and satisfactory manner in which you discharged the duties of Medical Director on my staff during the recent campaign, and especially on the battle-field before Nashville, and my profound regret that your duties with your command at Savannah, Geo., deprives me of your services.

Very respectfully, your obedient servant,
JAMES B STEEDMAN,
Major-General Com'dg.

Surgeon A. C Jenner,
Fifth Reg't O. V. I.

Exempt from Dismissal.—Surgeon Chas. E. Cady, 138th Penna. Vols., charged with offences, and heretofore published, is exempt from being dismissed the service of the United States, he having made satisfactory defence before a board of officers, convened by General Orders No. 33, Nov. 16, 1864, from headquarters 8th Army Corps.

Resigned.—Surgeon Wm. Dickinson, U. S. V.

NAVY.

Regular Naval Service.

Detached.—Surgeon John S. Messersmith, and Ass't Surgeon Stephen J. Clark, from the *Constellation*, and waiting orders.

Resigned.—Ass't Surgeon Wm. Longshaw, Jr., of the *Minnesota*. (Dr. Longshaw was killed in the attack on Fort Fisher.)

Volunteer Naval Service.

Ordered.—Act'g Ass't Surgeon Louis Michael, to the *Neptune*.

Detached.—Act'g Ass't Surgeon Geo. C. Reynolds, from the (late) *Otsego*, and waiting orders.

Act'g Ass't Surgeon Geo. W. Hatch, from the *Spirea*, and waiting orders.

Act'g Ass t Surgeon Wm. S. Bowen, from the *Ohio*, and ordered to the *J. L. Davis*.

Resigned.—Act'g Ass't Surgeon Wm. H. Taggart.

Act'g Ass't Surgeon Franklin W. Brigham, of the *Kanawha*.

Act'g Ass't Surgeon J. F. A. Adams, of the *G. L. Davis*.

MARRIED.

Angle—Linn.—In Lewisburgh, Pa., Dec. 22d, 1864, by Rev. H. Harbaugh, D. D., John S. Angle, M. D., of Welsh Run, Pa., and Miss Laura S. Linn, daughter of Jas. F. Linn, Esq., of Lewisburgh, Pa.

Curtis—Dodge.—At Salem, Mass., Jan. 1st, by the Rev. Mr. Wilson, Hall Curtis, M. D., of Boston, late Surgeon of the 2d Mass. heavy artillery, and Miss Alice Dodge, daughter of John H. Silsbee, Esq., of Salem.

Helt—Brandel.—Jan. 2d, 1865, at the residence of the bride's father, Fort Atkinson, Wis., by Rev. Wm. C. Scofield, Mr L. B. Helt, Student of Medicine, of Fredericktown, Ohio, and Maggie C., daughter of Henry Brandel, Esq.

Johnston—Jenkins.—In New York, on Saturday, Jan. 21, by Rev. Dr. G H. Houghton, Lieut. Louis M. Johnston, youngest son of the late Francis Upton Johnston, M. D., of that city, and Mary Dunbar, youngest daughter of the late John C. Jenkins, M. D., Elgin, of Natchez, Miss.

White—Hopkins.—In Boston, Jan. 17, by Rev. Geo. W. Gardner, Elisha M. White, Surgeon of the 37th Mass. Vols., and Miss Amelia, daughter of Franklin Hopkins, Esq.

DIED.

Bacon.—In New York, on Monday, Jan. 23, David Francis Bacon, M. D., in the 52d year of his age.

Cogswell.—At Albany, on Saturday, Jan. 21, Mason F. Cogswell, M. D., Ass't Surgeon, in charge of the U. S. hospital at that place.

Garniss.—At Newark, N. J., on Saturday, Jan 21, Caroline S., wife of Thos. W. Garniss, and daughter of the late Dr. David Rogers, of New York.

Hull.—In Catskill, N. Y., on Saturday, Jan. 21, of paralysis, Mrs. Lydia C. Hull, relict of Amos G. Hull, M. D., aged 81 years.

Peltz.—Lost on board the Patapsco, Iron-clad, sunk recently by the explosion of a torpedo in Charleston Harbor, Samuel H. Peltz, M. D., U. S. N.

Place.—At Harlem, N. Y., on Saturday, Jan. 14, 1865, of consumption, Libbie, wife of Richard S. Place, and daughter of Amelia A., and the late John R. Chapin, M. D.

ANSWERS TO CORRESPONDENTS.

☞ Correspondents will please bear in mind that it is just now exceedingly difficult to get some kinds of work done, and much delay is sometimes caused thereby in filling orders. *Everything is at maximum prices.* Many books are out of print, and publishers are not issuing many new works or editions. Foreign books had better not be ordered.

Dr. W. J. McH., Brighton, Mich.—Slade on Diphtheria, and Tanner on Diseases of Infancy and Childhood, were mailed to you on the 24th ult.

Dr. E. S. F. A., Yonkers, N. Y.—Hughes on Auscultation, was mailed to you on the 27th ult.

Dr G. A M., Plainville, Conn.—Dalton's Physiology, and Barclay's Medical Diagnosis, were mailed to you on the 24th ult.

Dr. J. D., Hellam, Pa.—Dixon on the Eye, was mailed to you on the 24th ult.

Dr. O. M. T., Bethel, Me.—Slade on Diphtheria, and Thompson on Pulmonary Consumption, were mailed to you on the 24th ult.

Dr. M. M., Wilton, Iowa.—Vols. 2, 3 and 4, of Reporter, bound, sent you by mail on the 24th.

Dr P. W. R., Pa.—Brown-Séquard, on Paralysis of Lower Extremities, sent you on the 27th.

Medical Society of the State of New York.

The Fifty-eighth Annual Meeting of the Medical Society of the State of New York will be held in Albany, on Tuesday, Wednesday and Thursday, February 7th, 8th and 9th, 1865.

Credentials of Delegates should state the period from which to which they are elected. Members of the profession from other States are cordially invited to be present.

SYLVESTER D. WILLARD,
Secretary.

METEOROLOGY.

January.	23,	24,	25,	26,	27,	28,	29.
Wind.....	E.	N. W.	N. W.	N. W.	N. W.	N. W.	N. W.
Weather ...	Cl'dy. Rain.	Clear.	Clear.	Clear.	Clear.	Clear.	Cl'dy. Snow.
Depth Rain...	5-10						
Thermometer							
Minimum.....	30°	21°	15°	8°	6°	2°	19°
At 8 A. M.....	35	30	18	15	12	8	23
At 12 M.....	38	31	21	20	16	14	31
At 3 P. M.....	37	31	21	20	16	16	30
Mean.....	35.	25.75	18.75	15.75	12.75	10.	25.75
Barometer.							
At 12 M.....	29.6	29.9	30.	29.9	29.9	30.	30.3

Germantown, Pa. B. J. Lehdon.

WANTED.

Subscribers having any of the following numbers to spare, will confer a favor, and likewise be credited on their running subscriptions, with such as they may return us.

Vols. I, II, III & IV. All the numbers.

Vol. V. No. 1, Oct. 6, '60; No. 19, Feb. 9, '61.

" VI. Nos. 18, 19, Aug. 3, 10, '61.

" VII. Nos. 1, 2, 6, Oct. 5, 12, Nov. 9, '61; Nos. 10 to 12, Dec. 7, '61, to March 8, '63.

" VIII. Nos. 17, 18, 19. 22, 23, July 26, Aug. 2, 9, 30, Sept. 6, '62.

" IX. Nos. 6, 7, 8, 13 & 14, 17 & 18, Nov. 8, 15, 22, '62, Dec. 27, '62, & Jan. 3, '63, Jan. 24 & 31, '63.

" XI. Nos. 1, 3, 4, 5, 7, 11, 21, Jan. 2, 16, 23, 30, Feb. 13, March 12, May 21, '64.